

## **TANK STARS**

We implemented the two-player (1 vs 1) game mode where players face off on hilly terrain, taking turns firing bombs at one another. Players get a limited fuel ration per turn and are allowed to position themselves for a better shot. They can gain weapon upgrades by random airdrops and must shoot at one another until one of their tanks is destroyed. We used the libGDX to make the game.

We first use JUnit testing to check whether the program runs or not if it runs successfully the code runs else throws an error. To implement this we used thread to run the program parallelly. We even used serialization to save the data. In the end, we used different screens and classes to achieve the working prototype of the game. Tanks classes to implement the movement of the tank, bullet class to inflict damage, and other different classes which inherited these classes to run the program. Buttons used to go to different screens and we even handled fuel and damage to a tank and bullet. Selecting different tanks were also handled. We used different OOPS concepts like polymorphism, composition, association, dependency, abstract class, inheritance, and many more.

Contributions -

Basic Requirements:

- 1) Main page: Yash and kartikey
  - a) New game button: yash
  - b) Resume game button: yash
  - c) Exit game button: kartikey
- 2) Resume game button: It should lead to a screen showing a list of saved games :  
Yash

3) In-game options: kartikey

a) (on losing) Restart game, exit to main menu : kartikey

b) During gameplay - a pause input, save the state of the game : yash

4) GUI should be designed using LibGDX or JavaFX and should be similar to the gameplay : yash

5) Minimum number of different types of tanks to be included should be 3 [Refer types of tanks available in Tank Stars].: kartikey

6) Show the current health at an appropriate position on the screen.: kartikey

7) Command line output will not be considered part of the game. GUI should be the sole interface for interaction: yash